## APPENDIX 5-M BLIND CANYON INTAKE PORTAL

## BLIND CANYON INTAKE AND FAN PORTALS

In order to facilitate adequate ventilation across the working face as mining advances from the existing intake portals and to provide an alternative escape way, Co-op Mining requested approval for the blind Canyon Ventilation Portal as shown on Plate 5-1A. In addition to the main fan portal, a small breakthrough exists 80 ft to the north. This opening will be used as an intake portal. Three accidental breakouts have also been observed in the Bear Canyon Seam, two South of the main fan portal and one North of the intake portal.

Because of the proximity of the portals, the surface configuration and operations involved in their creation are similar. The portals are implemented form within the mine by utilization of standard mining methodology and implementation of a continuous miner. The portals simply extended to an exposed coal outcrop in the head of Blind Canyon. The outcrop originally had a 4 ft overhang made up of an overlying sandstone seam approx 12 ft thick. The coal being of a more erosive nature then the sandstone is incised into the slope. The toe of the coal outcrop is composed of broken ledge rock and lies on approximately a 70 pct slope. The nature and location of the outcrop precludes surface access by any means other than foot. Due to this, they are suitable for an escapeway in the event of a catastrophic closure of the existing portal area and is strongly supported by Co-op's safety personnel as well as M.S.H.A

The three accidental breakouts are the result of outcrop material caving into the entries adjacent to the portals.

The portals are supported by roof bolts, which extend into the sandstone rock above the coal. Where necessary, bolted matting will be used to minimize sluffing of rock. The intake portal will be closed with a cement stopping for later use. The intake portal will be closed with a cement stopping for later use. The stopping will prevent access of people as well as large animals, which could theoretically utilize the portal for denning. The fan portal will contain an escapeway door on the fan motor housing, which will only allow access from within the mine. A "No Trespassing" sign will be posted outside the portal. Accidental breakouts large enough to allow entrance into the mine will be fenced and stoppings built to prevent access into the mine.

Surface disturbance is minimal due to the nature of a continuous mining machine pulling the material into the mine. To meet MSHA requirements, a small pad, approximately 30 ft. by 60 ft., will be used in font of the portal for the fan structure. This will require the movement of approximately 240 cu. yds. Of material, which will be placed in a dry area inside the mine. Upon reclamation, the material pulled into the mine will be replaced (see Figure 5M-1). Bonding includes reclamation of the portal. No vegetation exists on the coal outcrop, which will be impacted. Coal debris, which crumbled and fell down the slope during portal construction had been retrieved by hand to whatever degree is reasonable. It is important to note that due to the exposed nature of the coal seam, there is eroded coal presently on the slope.

The drainage form above the portal is minimal due to the size of the impacted area next to the portal. Any water falling on the pad will be contained with a berm. This area of the mine is dry, and no water will be discharged from the portals.

## RECLAMATION

It is anticipated that the reclamation can be accomplished form within the mine by removing all support structures. An LHD will be used to replace the pad material. A D-2 Class Crawler dozer will be utilized to push non-combustible fill into the portals for a minimum distance of 25 ft. A seal will be installed as pictured in Chapter 5, Figure 5-3. The natural appearance of the canyon will be re-established with only the sealing of the portal due to the total lack of vegetation on an exposed seam.

Minimal adverse impacts are anticipated to the surrounding environment. Surface water will not enter the mine due to the overhanging ledge and dip of the coal seam at this point. Also, this is a dry area of the mine, so no mine water is anticipated to be discharged from the portal. If water were to be encountered, Co-op would take whatever action was necessary to contain this water within the mine.

There are no raptor nests present within a half mile of the portal as noted on Coop's most recent raptor survey. When the fan is installed there will be an increase in noise anticipated in the area, but due to the constant nature of the fan related noise the impact should be minimal. In order to reduce disturbance during periods of construction, work will not be accomplished during elk calving period or deer fawning periods. Vegetation and forage loss is not anticipated due to the absence of vegetation on an exposed coal seam.

